compared with the blood serum from a similar non-operated animal, there was always found a large quantity of precipitate (globulin?) resulting from this reaction. The quantity was less the greater the time elapsing between the operation and the taking of the blood from the animal. When the time periods were the same the quantity of precipitate was greater in the few cases in which the healing of the operation occurred by secondary intention. Bolognesi calls attention to the fact that the increase in the opsonic index of the blood found after chloroform narcosis is lacking in a simple operation without narcosis. The quantity of the precipitate found after operation corresponds to the effect on the opsonic index. In those cases in which after operation microbic infection develops, and in those in which after narcosis the opsonic index is increased, the above-mentioned precipitate is abundant.

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**A Communication on Nerve Surgery, with a Preliminary Report on the Anatomical Healing of Nerve Wounds.**—BARDENHEUER (*Deut. Ztschr. f. Chir.*, 1908, xcvl, 24) presents a very elaborate paper on this subject, covering 200 pages. He says that the neuron theory is fully established at the present time. Nerve defects are bridged over, in all probability, chiefly through the outgrowth of fibrillæ from the central stump, rarely through connection with another center by means of anastomosis formation. The nerve fibres convey the impulses, while the ganglion cells are the functional and trophic center for the nerve fibers. For the preservation of the function of the nerve, its continuity with the ganglion cell and its nourishment by the blood are necessary. In excisions the muscles should be shortened according to the bone defect, in order that they may be so put on the stretch that they contract on the first impulse of the will and the circulation be made active. When there exists a circular constriction of the nerves and bloodvessels from non-inflammatory cicatricial tissue, conduction is impeded, from deficient elements in the ganglion cells, secondary pressure atrophy of the perifibrillar tissue, or marked and continued pressure upon the nerve fibers. Lateral pressure is dangerous only when the nerve cannot escape the pressure, *i.e.*, when the pressure works concentrically upon it, and arrests the influence of the ganglion cell. Degeneration of the peripheral portion then follows. The pressure of inflammatory material and intravaginal blood and lymph collections may produce this effect. Nerve sutures are best introduced through the nerve itself, and should be of thin catgut. In old wounds the fibrillæ adhere to each other better side to side, in which position the sutures can be more correctly placed. These at times give a better prognosis than recent wounds. For complete return of nerve conduction in the peripheral course of the nerve, three to six weeks, often a month, is necessary. In central, thick nerves, one or several years may be necessary, or it may fail entirely. Exceptionally function may return in five to twenty days, in which case there probably remained a previous anastomosis between the peripheral stump and a neighboring nerve, or between the two nerve stumps. Clinically, healing appears to occur by first intention. Histologically, it is not proved, and its demonstration appears to be impossible. Transplantation of entire nerves or by nerve flaps from an intact or slightly paralyzed nerve often gives good results. It is always best to combine it with a corresponding transplantation of the tendons, a shortening of the paralyzed muscles by suture, and a cutting of the sound muscles and tendons. For transplantation of nerves one should take a sound nerve or a flap from a sound nerve, the function of which is not important. For this reason the hypoglossal is to be preferred to the spinal accessory, or the obturator to the crural. Hypoglossal grafting never gave better results in old wounds than in recent paralysis. The posttraumatic and postinfectious limitation of joint movements and the disturbance of nerve conduction are due not only to the adhesions of muscles and tendons to each other and shortening of the capsule on the flexor side, but also to the adhesions between tendons and nerves, which causes a constriction of the latter as well as of the arteries by the connective tissue. Under these circumstances the muscles, tendons, and nerves should be loosened, and tenotomy on the side of the injury, with myorrhaphy on the opposite side of the joint, should be done. Ischemic contractures result from interference with the return in the veins from callous constriction and a resulting neuritis. The so-called narcosis paralysis and birth palsy are due to pressure of the head upon the main vessels, accompanied by mild or severe ischemic inflammation of the muscles. In small caliber wounds of the bone and tearing of an important nerve, the nerve should be exposed in from eight to fourteen days and nerve sutures introduced. In subcutaneous nerve injuries, with moderate and rapidly disappearing paralysis, the old method of treatment with electricity and gymnastics is indicated. In old traumatic paralysis, with node formation at the site of the lesion, the electrical examination must decide the treatment after exposure of the nerve. If there is no reaction on electrical irritation on all sides of the node, then the node should be excised and the cut ends sutured together. When the reaction is present, an incision should be made through the sheath of the nerve, the blood clot removed, and the nerve and nerve sheath sutured. The very rare recurrences after ganglion excision result from anastomosis formation. After neurectomy they are due to outgrowths from the central end of the nerve or to the anastomosis of a neighboring nerve. Recurrences after neurinsarkoklesis are very rare and are the results of faults in the operation. Occasionally after excisions of the elbow, hand, and knee, there occurs, without injury of a nerve or ischemic palsy from a tourniquet, an almost complete paralysis of all the muscles. These depend, chiefly, upon the too great shortening of the bones and the relatively too great length of the muscles. The nourishment of the nerves is interfered with by the resulting deficient circulation of the blood and lymph in the nerves due to faulty tension and action of the muscles and nerves and to the surrounding inflammation. In all the nerve pressure palsies, such as occur after luxations and contusions, operation is indicated, because without it often months and years will be necessary for a cure.

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**Œsophageal Sarcoma.**—VON HACKER (*Mitt. a. d. Grenzgeb. d. Med. u. Chir.*, 1908, xc, 396) says that primary sarcoma of the œsophagus is very rare and may be regarded as a curiosity. Von Hacker reports two new cases and gives statistics of 19 cases collected from the literature. The first of his cases was a leiomyosarcoma, polypoid in shape, with its pedicle attached to the œsophageal wall, about 10 cm. below the bifurcation of the trachea. It filled up the markedly dilated œsophagus,